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PROGRAMS AND SERVICES FOR MUNICIPAL GOVERNMENTS 1985 - 86

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ALBERTA ENVIRONMENT - PROGRAMS & SERVICES FOR MUNICIPAL GOVERNMENTS

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A. Approvals, Permits and Licenses

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APPROVALS, PERMITS & LICENCES

CLEAN WATER PERMITS TO CONSTRUCT AND LICENCES TO OPERATE FOR MUNICIPAL PLANTS

Service Beneficiary: Public/Municipalities

Objective/Purpose: To ensure Albertans have safe drinking water and to protect the quality of the province's surface and groundwater and land resources from municipal wastewater pollution.

Description of Service:

The Director of Standards and Approvals, under the Clean Water Act, the Clean Water (General) Regulations and Clean Water (general) Regulations and the Clean Water (Municipal Plants) Regulations has responsibility for reviewing and issuing approvals for the construction and operation of the following municipal facilities:

i) storm water systems;

ii) sewerage projects including sewer systems and wastewater treatment facilities (private septic tank systems are excluded); and

iii) waterworks systems including water supply systems, water treatment facilities and water distribution systems (single family dwelling systems are excluded).

The formal approvals issued by the Director of Standards and Approvals for municipal projects include:

i) Permits to Construct;

ii) Certificates of Compliance;

iii) Licences to Operate; and

iv) Letters of Permission

These formal approvals are issued based on technical reviews of project reports, plans, specifications an other associated submissions. Submissions are reviewed in relation to: Clean Water Legislation; standards/guidelines/criteria that have been developed by the Department; and accepted municipal engineering design concepts and practices. Department staff through correspondence and meetings work with the public and municipalities to plan and implement municipal water supply and sewerage systems. This public function, combined with in-house project reviews, is extremely important in maintaining and protecting public health in Alberta.

APPROVALS, PERMITS & LICENCES

DEVELOPMENT AND RECLAMATION APPROVALS

Service Beneficiary: Public, Industry, Municipalities

Objective/Purpose: To protect the environment by minimizing surface disturbance and ensuring disturbed land is returned to equivalent land capabilities upon the conclusion of land reclamation.

Description of Service:

Prior to commencing a regulated operation, an operator must submit an application for Development and Reclamation Approval. This application outlines the operator's plans to anticipate problems, minimize the extent and effects of disturbance, and to ensure successful reclamation. The plans are reviewed by government for compliance with land resource legislation and policies.

The Development and Reclamation Approval specifies operating terms and conditions for development and reclamation activities.

Types of projects designated by law as regulated operations include:

- Coal Mines
- Oil Sands Mines
- In-situ Oil Sands Recovery Schemes
- Oil and Gas Pipelines
- Sand, Gravel, Clay and Marl Operations

APPROVALS, PERMITS & LICENCES

PESTICIDE APPLICATION PERMITS AND APPLICATOR AND VENDOR LICENCES

Service Beneficiary: Public, Industry, and Municipal Governments

Objective/Purpose: To facilitate the enhancement of society and protection of man, animals, and the environment through the safe and efficient management of pesticide chemicals.

Description of Service:

Licences are required:

i) to operate a business or provide a service involving the sale, use or application of a pesticide; and

ii) to apply or sell pesticides for hire or reward, or to offer to apply or sell pesticides.

Twelve (12) separate classes of commercial applicator licences are issued, depending upon the particular type of pest control that is offered. The applicator is licenced, provided he/she has met the qualifications and requirements of training, experience, insurance and medical examination set by the legislation. The applicator is required to maintain records for each pesticide application and to submit record summaries each year.

Two classes of wholesale pesticide vendor licences are issued, as well as three classes of retail pesticide vendor licences. The holder of a retail vendor licence is required to ensure that at least one competent individual is at each premise or outlet covered by the licence and to comply with legislative requirements for storage, display and record-keeping.

Permits are required:

i) for the application of pesticides to or within 30 horizontal metres of water bodies;

ii) for the application of pesticides in the green zone of the province for the control of vegetation along rights-of-way;

iii) for the use of such restricted products as hydrocyanic acid gas, methyl bromide, phosphine or strychnine over 2%; and

iv) for research and testing of un-registered pesticides or un-registered use of pesticides.

All permits issued by the department ensure compliance with either federal registration of product use or federal research permits which are submitted with the application for a permit.

APPROVALS, PERMITS AND LICENSES

BEVERAGE CONTAINER LICENSES

Service Beneficiary: Public

Objective/Purpose: Sets up a system for the orderly collection and recycling of beverage containers.

Description of Service:

The Department:

- licenses beverage container return depots
- sets deposit levels on refillable and non-refillable containers
- sets handling charges for depots
- mediates disputes between depots, manufacturers and the public
- enforces the Beverage Container Act
- aids the manufacturer with advice on recycling material collected

The Department is not involved with mobile collection services. About 200 licensed depot operators are registered in the Province at the present time.

APPROVALS, PERMITS and LICENCES

SURFACE WATER PERMITS and LICENCES

Service Beneficiary: Public, Municipalities, Industry

Objective/Purpose: The allocation of water in an orderly way and for beneficial purposes. At the same time, the source of supply, individual rights, and the environment must be protected.

Description of Service:

Licences are required:

- to divert and use water for a number of purposes, including domestic, municipal, irrigation, agricultural and industrial.

- to dam, impound or store water for such things as stock water, flood control, flow regulation and erosion control.

- to divert water, without impounding, for drainage or flood control.

This licence would stipulate the location, source of supply and quantity and rate of withdrawal.

Permits are required:

- to place any structure or material (e.g. pipelines and bridges), which may affect water management, in, over or next to water.

- to alter the shoreline, banks or bed of a body of water in a way which may affect water management, including sand and gravel removal, erosion protection and brushing operations, docks and wharfs.

This permit would stipulate the location and terms and conditions related to construction procedures and timing.

Approval is NOT necessary for:

- domestic farm use and irrigation of up to one acre of garden

- construction of a small dugout for domestic stock water.

APPROVALS, PERMITS and LICENCES

GROUNDWATER PERMITS and LICENCES

Service Beneficiary: Public, Municipalities, Industry

Objective/Purpose: The allocation of water in an orderly way and for beneficial purposes. At the same time, source of supply, individual rights and the environment must also be protected.

Description of Service:

Licences are required to divert and use groundwater on a permanent basis for a number of purposes, including:

- Municipal - hamlets, villages, towns cities, countries
- Agricultural - feedlots
- Industrial - processing and cooling water, waterflood
- Irrigation - including greenhouses and tree farms

This licence would stipulate the location, source of supply, and quantity and rate of withdrawal.

Temporary Permits are required to divert and use groundwater on a temporary basis for any of the above listed purposes, but are most often issued for:

- construction camps
- pilot plants
- dewatering construction sites and mines

This temporary permit would stipulate the location, source of supply, quantity and rate of withdrawal and date expiry.

Approval is NOT necessary for:

- domestic farm use and irrigation of up to one acre of property
- household use on property owned or occupied by the well owner, such as on acreages
- wells equipped with hand pumps
- small quantities of water used for human consumption in small industrial buildings.

B. Monitoring Control and Enforcement

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MONITORING, CONTROL and ENFORCEMENT

LAND RECLAMATION

Service Beneficiary: Public, Municipalities, Industry

Objective/Purpose: The LCRC (Land Conservation and Reclamation Council) has the responsibility under the Land Surface Conservation and Reclamation Act to ensure that the construction operation and abandonment of surface disturbing operations are performed in such a manner as to return the land to the same productive capability as was prior to disturbance.

Description of Service:

Before an operator can abondon an operation or surrender the surface lease, he must apply for and receive a Reclamation Certificate. The issuance of a Reclamation Certificate requires an inspection of the site by the Reclamation Officers along with the land owner and the company. Any indication of a problem with the land may require the Reclamation Officers to issue a Reclamation Order which would include topsoiling, manuring, cultivation, or rock picking, etc. If the Reclamation Officer finds that proper reclamation has been reached, he will then issue a Reclamation Certificate.

Types of projects that require monitoring and certification:

Wellsites and access roads
Pipelines
Batteries
Transmission Lines
Quarries
Coal and Oil Sands Mines
Sand, Gravel, Clay and Marl Pits
Waste Disposal Sites
Land Fill Sites
Coal and Oil Sands Exploration

MONITORING, CONTROL and ENFORCEMENT

SAND and GRAVEL PROGRAM

Service Beneficiary: Public, Municipalities, Industry

Objective/Purpose: To ensure that Sand and Gravel pits on patented land will be reclaimed to a useful state.

Description of Service:

The program has documented 1000 pits in 25 municipalities and operators are being notified one municipality at a time of the reclamation and approval requirements.

Pits disturbing over 5 acres require a Development and Reclamation Approval prior to operation. Approximately 45% of the 1000 pits documented are in this category. The Sand Gravel Clay and Marl Regulations AR 228/82 applies to private, municipal and provincial operations on patented land. A security deposit of $250.00 per acre is required for private operations but no security is required for municipal or provincial operations.

To date the gravel operators in 25 municipalities have been notified of the requirements and another 9 municipalities will be notified in the coming year. The municipalities identified as having increased industrial use for aggregate will be given priority for notification.

Of the 450 pit operators contacted to date 96% have responded positively to requests for Development and Reclamation plans, which indicates a high level of acceptance of the program.

MONITORING, CONTROL and ENFORCEMENT

PROVINCIAL GROUNDWATER OBSERVATION WELL NETWORK

Service Beneficiary: Public, Industry, Government authorities located across Provincial and Country boundaries.

Objective/Purpose: To monitor water levels and groundwater quality. This becomes a source of background data, which can be used to determine trends for the future development of this resource. The data obtained is used to assist in the orderly utilization and protection of our groundwater resources.

Description of Service:

The service is provided through (1) The Provincial Observation Well Network and (2) Oil Sands Observation Well Network.

(1) Provincial Observation Well Network

This is a network of over 140 wells located throughout the province. Fifty of these wells can be classified as "local" because they are located near areas of known influences on groundwater, for example, rivers, pumping wells and dams. Monitoring of these wells (continuous water level recordings and periodic water sampling) provides data to determine the influence exerted on the groundwater resource. The remainder of the wells monitored (approximately 90) are used to determine background data on water levels and water quality for most major aquifers.

(2) Oil Sands Observation Well Network

The other monitoring network is in the vicinity of Fort McMurray. It consists of over 90 wells over 28 sites located around the current Oil Sands plants. The wells range in depth from 6 to 450 m with the purpose of monitoring water levels and water quality.

This service of monitoring was continued after the networks were absorbed, in mid 1982, from the Alberta Research Council. It is an ongoing program expected to maintain most of the present wells and expand into new areas throughout Alberta. Data is available.

MONITORING, CONTROL AND ENFORCEMENT

LITTER CONTROL

Service Beneficiary: Public Municipalities

Objective/Purpose: To provide municipalities with a mechanism to help control litter and litter related properties - i.e. unsightly premises, etc.

Description of Service:

The Act provides mechanism to:

- charge people with offenses if they are caught littering and allow for clean up by the Crown
- require clean up of unsightly premises, including clean up by the Crown with cost recovery if necessary
- requires for clean up of spills on highways or roadways with clean up by the Crown with cost recovery if necessary

The Department is also involved with other litter programs through funding outdoors unlittered. Clean up orders for 1984/85 fiscal year amounted to 121. They were issued by municipalities.

MONITORING, CONTROL and ENFORCEMENT

PESTICIDE MANAGEMENT

Service Beneficiary: Public, Industry, and Municipal Governments

Objective/Purpose:

Description of Service:

Control:

In Alberta, pesticide chemicals are controlled under the Agricultural Chemicals Act & Regulations, and it is the policy of the department to develop and administer legislation which will encompass four broad aspects of pesticide management:

i) control of use, application, handling, and monitoring;

ii) assignment and sharing of responsibilities with other jurisdictions;

iii) provision for the incorporation of advice on the management of pesticides; and

iv) provision for the undertaking of such management responsiblities as the classification or scheduling of pesticide chemicals.

The Agricultural Chemicals Act is designed to develop a high standard of management practice and awareness by those person, organizations and agencies affected by the legislation.

The Pesticides Chemicals Branch, within the department, is given the responsibility for administering the act, its provisions and regulations, and the general management functions which flow from the legislation. Additionally, under the act, local authorities are required to appoint inspectors to carry out the provisions of the legislation within the boundaries of their municipalities.

Control measures to ensure the safe, informed, effective application of pesticide chemicals include:

i) permits
ii) licences
iii) examinations
iv) scheduling of pesticides to various classes, depending upon potential for human health hazard and/or environmental hazard; and
v) monitoring and inspections.

Monitoring and Inspections:

Over 2000 inspections are carried out annually to assess compliance with licence requirements for pesticide applicators and vendor outlets, as well as for compliance with registered uses of pesticides; an additional 250-300 inspections (pre- and post-treatment) are conducted annually to ensure adherence to permit conditions.

Monitoring programs which are carried out on an on-going basis, include:

i) residue sampling of foods, feeds and potable water;
ii) environmentally-sensitive areas such as water bodies and forested areas; and
iii) use patterns of selected pesticides to determine the potential risk to human health and the environment.

Special Projects: Four such projects have been initiated to monitor:

i) the impact of irrigation practices on mosquito production and subsequent control measures;

ii) natural mosquito control provided by selected aquatic predators and pathogens (as an alternative to pesticide control);

iii) environmental impact of river treatment for black fly control; and

iv) disposal of agricultural pesticide containers.

Enforcement: The Agricultural Chemcials Act provides for the issuance of:

i) a written suspension order - by any inspector under the act who is of the opinion that the use, handling, storage, display, disposal or transport of an agricultural chemical is dangerous to the health of any person or animal;

ii) a chemical control order - by the Director of the Pollution Control Division outlining specific corrective action to be taken within stated time constraints.

iii) prosecution - a person who contravenes the Agriculutral Chemicals Act or the regulations is guilty of an offence and is liable to a fine of not more than $1000 or to imprisonment for 90 days without the option of a fine, or to both fine and imprisonment.

C. Information and Advisory Services

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3) Wastewater Irrigation and Sludge Spreading Page 21

4) Regional and Modified Landfill Investigations Page 22

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INFORMATION AND ADVISORY SERVICES

WATER RESOURCES INSPECTION SERVICES

Service Beneficiary: Public, municipalities

Objective/Purpose: To provide technical and engineering advice to individuals and municipalities on problems caused by surface water.

Description of Service:

Requests for inspections are made to the Regional Office of the Water Resources Administration Division. Field investigations are conducted by department staff and technical reports are prepared. All individuals involved in an inspection are advised in writing of the proposed action and recommendations required to resolve the surface water problem.

Technical and engineering advice is provided on a first come first serve basis.

This is an ongoing program that has been in place for many years.

INFORMATION AND ADVISORY SERVICES

GROUNDWATER RESOURCES INFORMATION SERVICES

Service Beneficiary: Public, Industry, Government authorities.

Objective/Purpose: To maintain and develop a systematic source of groundwater data in the Province, with ready access in order to supply the information to the general public, industry and consultants in a format compatible with their needs.

Description of Service:

A general groundwater data file, made up of over 250,000 files and growing at a rate of about 12,000 files per year, is maintained. It contains driller reports submitted as a requirement under the Ground Water Development Act, water chemistry reports from the Division Laboratory in Lethbridge and the Environmental Centre Laboratory in Vegreville, geophysical logs, pumping test data and other relevant well information. An index of basic data for individual wells is computerised.

The general file is supported by a groundwater reports file with over 3,000 titles received from consultants and government agencies. Each report is indexed in a bibliography.

Both files are microfilmed and regularly updated.

Responses to public information requests are immediately given over the phone when possible, or by providing paper or microfiche copies of the pertinent documents. Availability of the services is actively promoted.

INFORMATION AND ADVISORY SERVICES

WASTEWATER IRRIGATION AND SLUDGE SPREADING

Service Beneficiary: Public, Industry and Municipal Governments

Objective/Purpose:

1. To make recommendations regarding suitability of land to receive municipal wastewater irrigation.
2. To assess the suitability of land treatment of industrial wastes over the long-term and at field scale.
3. To investigate crop yields and changes in chemical character of soils and plants as the result of land spreading of sewage sludge.

Description of Service:

1. Municipal Wastewater Irrigation
   Samples of effluent from sewage lagoon are analyzed to determine if the quality is suitable for irrigation. If so, the soils to be used are tested to determine physical and chemical characteristics. In some cases data from consultants' reports are reviewed.

2. Evaluation of Industrial Wastewater Schemes
   Numerous industrial wastewaters with high organic and nutrient concentrations are difficult to treat by irrigating at the same rates as for municipal wastewater. And treatment of such wastewaters from some industries appears feasible. To determine this, soils and groundwater quality of irrigation schemes associated with potato, meat, sour gas processing plants and nitrogen fertilizer manufacturers, are monitored.

3. Land Spreading of Sewage Sludge
   Many communities in Alberta find their sewage sludge storage lagoons fill rapidly to capacity. An alternative to building new lagoons is land spreading. Sludge adds nitrogen and phosphorus, as well as heavy metals, to the soil. There is concern that the heavy metals will enter the food chain through crops grown on the sludge-treated soil.

   Experimental plots have been established near Edmonton, Calgary and Red Deer. Soil and plant samples have been analyzed over a number of years to determine differences in chemical composition as a function of either rate of application or of time.

INFORMATION AND ADVISORY SERVICES

REGIONAL AND MODIFIED LANDFILL INVESTIGATIONS

Service Beneficiary: Public, municipal governments

Objective/Purpose: To ensure that landfills are developed at sites where the risk of groundwater contamination from the landfill is minimal.

Description of Service:

1. Regional Landfill Evaluations

   a) Municipalities are assisted in the selection of potentially suitable sites for landfill development by defining general areas through the use of published and unpublished data. That is, constraint maps are constructed for those parts of the area ranging radially from 8 to 24 kilometers from the particular municipality, showing suitable and unsuitable areas for landfilling.
   b) Requests for hydrogeological investigations are received for specific sites. The municipality is encouraged to submit several sites at once in order that some initial ranking can be done.
   c) Office evaluations are carried out using aerial photographs, and published and unpublished information, to rank the sites.
   d) A detailed hydrogeological investigation of the best available site is done to identify the following parameters:
      (i) topography and landforms;
      (ii) type of surficial and bedrock materials and hydraulic conductivities;
      (iii) shallow aquifers;
      (iv) depth to water table; and
      (v) direction of groundwater flow.

2. Modified Landfill Evaluations

   a) Again, assistance is provided by defining general suitable areas for landfills (smaller areas than for regional).
   b) Requests for investigations are received from the local health unit.
   c) Investigations are designed to identify topography and landforms; type of surficial and bedrock materials; shallow aquifers; and depth to water table.

INFORMATION AND ADVISORY SERVICES

PEST MANAGEMENT, DIAGNOSTIC AND EXTENSION SERVICES

Service Beneficiary: Agricultural Producers, Municipalities, Provincial Government and the Public

Objective/Purpose: To provide insect, plant disease, weed and chemical damage, diagnostic and extension services.

Description of Service:

1. Diagnostic Service - Several thousand samples are diagnosed annually for district agriculturists, agricultural fieldmen, Health Units, Alberta Agriculture Regional Crops Laboratories, farmers, horticulturists and home gardeners. In most cases control recommendations are provided or advice is given on how to prevent or reduce damage in future crops.

   a) Insects - Over 500 insect submissions of agricultural and public health significance are identified annually. Monitoring for the presence of the insect which spreads Dutch elm disease is maintained to keep the province free of the disease. (The disease is present in Manitoba and Montana).

   b) Plant Diseases - Over 1200 plants are received annually for disease identification. To determine the incidence of important diseases, surveys are conducted in grain, oilseed and forage crops in northeastern Alberta. Seed potatoes are checked for bacterial ring rot in support of Alberta Agriculture's Seed Potato Improvement Program.

   c) Weeds - About 500 weed diagnoses are made annually and advice is given on control methods. A weed garden is maintanined for training of field staff and for other extension purposes.

   d) Chemical Damage - Plants suspected of having been damaged by herbicide drift or by exposure to other chemicals are diagnosed. About 500 cases are handled each year. Correct diagnosis of damage caused by herbicides and other chemicals to field crops and other vegetation is necessary not only to determine cause of the damage but also to be able to assess economic losses, help settle legal claims and to provide information on how to prevent such occurrences.

2. Extension Services - Pest control information is provided through courses, seminars, talks, agricultural fairs, a Crops Field Day and contact with the farm news media. Publications such as "Weeds of Alberta" and "Biological Pest Management" and numerous brochures/pamphlets/ information sheets are made up to be used in extension activities.

INFORMATION AND ADVISORY SERVICES

PERT (POLLUTION EMERGENCY RESPONSE TEAM)

Service Beneficiary: Public, Industry, and Municipal Governments

Objective/Purpose: To provide successful mitigation of material spills and, after hours, to respond to calls from the public, industry and Municipal Governments pertaining to environmental matters - air and water pollutions, contraventions, complaints, etc.

Description of Service:

1. Service provided by the five branch of Pollution Control Division, each branch supplies one member.

   a) After receipt of information of a spill, review the situation; provide on-site supervision of containment, clean-up, disposition of cleaned-up materials and restoration of spill site; advise on mitigation of spills.

   b) Assure notification of other concerned agencies such as Forestry, Wildlife, Municipalities, Police.

   c) Investigate complaints and mitigate the problems.

   d) Monitor incidents to ensure minimal effect on the environment.

   e) Conduct follow-up inspections to ensure all problems have been addressed and corrected.

   f) Initiate and conduct enforcement proceedings as required in those cases where the problems are not being corrected.

On an average, over 800 telephone calls per year are responded to as part of the after hours emergency service.

INFORMATION AND ADVISORY SERVICES

WASTE MANIFEST SYSTEM

Service Beneficiary: Municipalities, Industries

Objective/Purpose: The Waste Manifest is a tracking system for hazardous wastes.

Description of Service:

It provides the generator of hazardous wastes with information about where his material is being shipped to.

It provides haulers and disposers with information as to exactly what kind of material they are hauling or disposing of.

The manifest is a six part form:

Copy #1 - completed by the generator, then it is mailed to Environment
Copy #2 - retained by the generator
Copy #3 - completed by the receiver, then it is mailed to Environment
Copy #4 - retained by the receiver
Copy #5 - retained by carrier
Copy #6 - mailed to generator by the receiver

Several thousand manifests are processed each year. Manifests have been implemented on a voluntary basis. The legislation under the Hazardous Chemical Act regarding manifests is a waiting proclamation.

INFORMATION AND ADVISORY SERVICES

PESTICIDE MANAGEMENT

Service Beneficiary: Public, Industry, and Municipal Government

Objective/Purpose: To facilitate the enhancement of society and protection of man, animals, and the environment through the safe and efficient management of pesticide chemicals.

Description of Service:

Training: Training courses have been developed to provide instruction in the safe and effective application and handling of pesticide chemicals; courses are provided for 10 separate classifications of pesticide applicator, as well as to presticide dispensers in retail outlets.

Extension: As a proactive measure of control, extension has provided significant gains in pesticide management. Activities include:

i) distribution of a monthly "update" newsletter to over 1700 recipients;

ii) publication of a semi-annual "Pesticides in Focus" report, as well as several other technical reports each year;

iii) presentation of seminars to a variety of pesticide-user groups, industry, schools, pesticide inspectors, etc;

iv) publication of a "Pesticide Poison Manual" for medical and hospital emergency-treatment staff;

v) publication of a "Pesticide Spills and Fires" manual for emergency-response agencies; and

vi) provision of technical assistance to several hundred public, industrial, government and news media pesticide-related queries annually.

D. Funding Available for Municipalities

1) Biting Fly Control Financial Assistance Program Page 29

2) Financial Assistance for Water Management Page 30

3) Resource Recovery Grant Page 31

4) Reclamation Program for Derelict Land Page 32

5) Alberta Waste Management Assistance Program Page 33

6) Pesticide Container Collection Program Page 34

FUNDING AVAILABLE FOR MUNICIPALITIES

BITING FLY CONTROL FINANCIAL ASSISTANCE PROGRAM

Service Beneficiary: This program is available to all municipal districts, who as a collective group, feel that their municipality has a serious biting fly infestation.

Objective/Purpose: To assist municipal governments in the initiation and/or improvement of Biting Fly Control Program.

Description of Service:

To be eligible for such grants, municipalities must submit an application for assistance to the Department of Environment prior to the commencement of their control programs, outlining proposed cost and methods of control. These proposals must be acceptable to the Department. Should conditions warrant that a control program receive any additional funds, such funds may be granted pending approval by the Minister of the Environment. Approved control programs will be subject to inspection. An annual report, including complete financial records, must be submitted by each municipality to the Department at the end of the control program in order to receive financial assistance. A licensed Class "L" applicator must supervise each abatement program.

Approved mosquito abatement programs will be funded in the following manner:

a) Municipalities whose population is less than 10,000 will be limited to $3 per capita for eligible expenses.
b) Municipalities whose population is greater than 10,000 and less than 100,000 will be limited to $2 per capita for eligible expenses.
c) Municipalities whose population is greater than 100,000 will be limited to $1 per capita for eligible expenses.

This program was implemented in 1974 and is an ongoing program of the Provincial Government. There is no known termination date.

The Provincial Budget is as follows:

1982/83	1983/84	1984/85	1985/86
$578,000	$585,000	$606,000	$630,000

FUNDING AVAILABLE FOR MUNICIPALITIES

FINANCIAL ASSISTANCE FOR WATER MANAGEMENT

Service Beneficiary: This program is available to all Alberta municipalities.

Objective/Purpose: To provide assistance to local authorities for the enhancement and regional development of the Province's water resources and to provide corrective measures where water, in its natural state, creates conditions adverse to the public interest.

Description of Service:

The project or projects must be initiated by a local authority, and a need for such a project must be established. The project must be in the public interest and provide benefits to the general public or protect public investment. Project planning and consideration of all aspects of water resource and environmental management must precede implementation. The local authority initiating the project must accept the responsibility for land acquisition, and operating and maintenance costs.

Agreements are entered into between the Minister of Environment (under the Water Resources Act) and the local authorities. Projects are funded on the basis of the budgetary priority for water management established by the government.

Payment is usually on a 75% - 25% basis (government funding up to 75%), however this may vary depending on the type of project and the amount of public benefit derived. The local authority receives payment upon submission of an itemized account of expenditures, which can be substantiated by documents at the local authority's office.

This is an ongoing program of the provincial government that was implemented in October, 1972.

The Provincial Budget is as follows:

1982/83	1983/84	1984/85	1985/86
$6,780,000	$6,780,000	$5,941,000	$5,941,000

FUNDING AVAILABLE FOR MUNICIPALITIES

RESOURCE RECOVERY GRANT

Service Beneficiary: All municipalities in Alberta are eligible.

Objective/Purpose: To encourage communities to become involved in the collection of recyclable material, and encourage the reduction of wastes that must be disposed.

Description of Service:

This is a Capital Grants Program. The Department will fund non-motorized equipment necessary for the separation and storage of recyclable marketable materials.

There is a $150,000 ceiling on total recycling grants available in 1985/86.

The program is funded 100% by the Province.

This is an ongoing program initially implemented in 1976. Applications are accepted throughout the year.

FUNDING AVAILABLE FOR MUNICIPALITIES

RECLAMATION PROGRAM FOR DERELICT LAND

Service Beneficiary: Municipalities

Objective/Purpose: To reclaim derelict land that has been left idle with the objective of making that land as productive as it was prior to disturbance. The land in question must be owned by a public body or must be purchased by a public body.

Description of Service:

The Reclamation Branch of Alberta Environment assumes all responsibilities for engineering, supervision, planning, hiring and paying contractors to complete reclamation projects.

Abandoned sites considered to be eligible include:

1. Coal mines or quarries.
2. Gravel pits.
3. Garbage dumps and sewage lagoons.
4. Refinery sites or other mineral processing plants.
5. Industrial sites.
6. Irrigation canals or man-made water reservoirs
7. Roadways, airports, railroads.

It should be clear, of course, that the intent of the reclamation funds is to improve sites that were disturbed prior to legislation and the rise of public concern over environmental problems. Recently abandoned sites under regulation will be carefully reviewed by Department staff prior to acceptance as reclamation projects.

NOTE: All the above mentioned eligible sites must be municipally owned land.

Some commonly submitted proposals which are NOT included in the program are:

1. Natural or water filled low lying areas.
2. Agricultural operations.
3. Forestry operations.
4. Removal of car body stock piles.
5. Picking up of scattered debris.
6. Erosion control resulting from agricultural and forestry operation, and municipal or provincial projects including road building and bridge construction.

This is an on going program of the Provincial Government that has approval till 1986/87. Applications by Municipalities can be made at any time during the year.

The Provincial Budget is as follows:

1982/83	1983/84	1984/85	1985/86
3,500,000	3,500,000	1,811,000	1,814,000

FUNDING AVAILABLE FOR MUNICIPALITIES

ALBERTA WASTE MANAGEMENT ASSISTANCE PROGRAM

Service Beneficiary: Available to all rural and urban municipalities who form a regional authority consisting of two or more urban municipalities plus one or more rural municipalities.

Objective/Purpose: To promote environmentally sound waste management throughout the Province.

Description of Service:

The Province will provide land and capital funding for regional sanitary landfill sites or other facilities for waste management.

The Province will pay 100% of the fair market value for land, and lease this land to the municipality for use as a sanitary landfill. Also, the Province will pay up to 100% of the initial capital costs of the systems. Annual operating costs are the responsibility of the regional authority.

This is an ongoing program of the Provincial Government that was implemented in December 1975.

The Provincial Budget is as follows:

1982/83	1983/84	1984/85	1985/86
$2,950,000	$2,950,000	$2,200,000	$2,200,000

FUNDING AVAILABLE FOR MUNICIPALITIES

PESTICIDE CONTAINER COLLECTION PROGRAM

Service Beneficiary: This program is available to all agricultural based local authorities that feel permanent pesticide container sites would benefit their farming populace.

Objective/Purpose: To provide technical and financial assistance in the selection and construction of permanent pesticide container collection sites.

Description of Service:

To be eligible for such grants, municipalities must select a site, secure Health Board approval, and submit an application to the Department of Environment. Enclosed with the signed application there must be a statement of expenses for the work to be done. These potential sites must be acceptable to the Department. If approved, notification allows the future recipient to begin construction immediately. Upon completion, the municipality must maintain the site and contact the Department when sufficient containers have been collected to warrant pickup.

Approved pesticide container collection sites will be funded in the following manner:

a) Should sufficient funds be available, all applications will be accepted.

b) If this is not so, preference will be given to municipalities making their first application under the program.

c) Number of funded sites and a ceiling on funding for each municipality have not been established, however, need must be shown.

This program was implemented in 1980 and is an ongoing program of the Provincial Government.

The Provincial Budget is as follows:

1982/83	1983/84	1984/85	1985/86
$200,000.00	$100,000.00	$50,000.00	$45,000.00

E. Research Services

1) Insects for Weed Control Page 37

RESEARCH SERVICES

INSECTS FOR WEED CONTROL

Service Beneficiary: Alberta Agriculture, farmers, horticulturists

Objective/Purpose: To screen evaluate and release insects and related organisms as economical and environmentally safe weed control agents.

Description of Service:

This work entails research into alternative weed control methods in uneconomic or environmentally sensitive areas and into the development of integrated weed management practices. In short: biological weed control research.

There are several projects:

1. Priority weeds - Information on Alberta weeds is gathered to produce a list of target weeds for biological control. Leafy sponge, perennial sow thistle and Canada thistle are initial selections as target weeds.

2. Under a contract with the Commonwealth Institute of Biological Control in Europe, studies are undertaken to screen insects prior to release for weed control in Canada. Further screening has to be done first by Agriculture Canada in Regina before releases can be made in Alberta.

3. Insect species are released and their effectiveness in controlling weeds is studied.

4. Surveys are conducted on insects which attack target weeds.

5. Indigenous plant diseases for weed control are being considered for another project in research on biological control.

F. Analytical Services

1) River Forecast Centre Page 41

ANALYTICAL SERVICES

RIVER FORECAST CENTRE

Service Beneficiary: Streamflow forecasting service is available to all people of Alberta particularly irrigation water users, hydro-electric companies, flood control agencies, recreationists.

Objective/Purpose: To provide river forecasts, real-time river information and real-time technical advice for Water Resources Management and general river usages for the province of Alberta.

Description of Service:

River Forecasting includes:
- flood forecasting and flood warning,
- water supply volume forecasting, and
- generally, the prediction of the rate of flow and the water level of a river at a location, or the water level of a lake or reservoir, for a number of days into the future.

Real-time river information includes:
- providing information on the current and expected streamflow conditions, and
- in particular, monitoring flow conditions at the borders of Alberta to ensure that the province meets its commitments to other jurisdictions as specified in the Master Agreement on Apportionment, and that other jurisdictions meet their commitments to Alberta.

Real-time water management technical advice includes:
- forecasting flood inflow to provincial water storage reservoirs,
- advising reservoir operators concerning real-time flood regulation operations,
- forecasting streamflow at diversion points along a river to anticipate the short-term future day-to-day water supply situation,
- advising reservoir operators concerning real-time water supply operations,
- advising the Water Resources Management Services of Alberta Environment concerning real-time water regulation strategies during periods of water supply shortage.

G. Water Resource Development, Operation and Maintenance

1) North West Alberta Erosion Control Program Page 45

2) Emergency Water Pumping Program Page 46

WATER RESOURCES DEVELOPMENT, OPERATION AND MAINTENANCE

NORTHWEST ALBERTA EROSION CONTROL PROGRAM

Service Beneficiary: This program is available to local authorities in northwestern Alberta. The program was established in recognition that the area differs from the rest of Alberta in its characteristics and condition related to erosion susceptibility.

Objective/Purpose: To provide assistance to local authorities in the designated area for construction, operation maintenance and rehabilitation of water resources projects.

Description of Service:

New projects must be initiated by the local authority. Costs are shared on a 75:25% basis for construction and for future maintenance. Engineering costs are funded 100% by the department.

The rehabilitation of previously cost shared projects will be funded 100% by the department. These projects are subsequently eligible for cost sharing on a 75:25% basis between the department and the local authority.

In the improvement districts the department, with its own forces, carries out maintenance on cost shared projects and recovers 25% of the cost from the improvement district. In organized local authorities the department will provide a 75% annual maintenance grant on approved projects.

Agreements for construction and maintenance are entered into between the Minister of Environment and the local authority subject to budgetary priorities established by the government.

This is an ongoing program that was implemented in 1978.

WATER RESOURCES DEVELOPMENT, OPERATION & MAINTENANCE

EMERGENCY WATER PUMPING PROGRAM

Service Beneficiary: Local Authorities & Public

Objective/Purpose: To provide assistance to local authorities and communities by providing pumps and pipes to relieve emergency situations related to water shortages.

Description of Service:

When a water shortage situation is anticipated, the local authority must initiate the request for assistance identifying the nature of the emergency. Upon inspection and confirmation of the emergency nature of the situation, the department will react by supplying the necessary equipment to alleviate the problem.

An agreement is entered into between Alberta Environment and the local authority once department involvement is determined, indicating the approximate cost and stipulating that the local authority is responsible for obtaining land easements and for supplying the required manpower for pipe installation.

Upon completion of the emergency pumping activity, the local authority is invoiced at cost to the department.

This is an ongoing program of the government.